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EXAMINER	
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ART UNIT	**PAPER NUMBER**
2628	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/601,842	OH ET AL.
	Examiner	Art Unit
	Greg F. Cunningham	2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 October 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications of amendment received 10/2/2002006.

2. The disposition of the claims is as follows: claims 1 and 3-20 are pending in the application. Claims 1, 11, 13 and 18 are independent claims. Claim 2 has been cancelled.

Claim Rejections - 35 USC § 112

3. In view of Applicant's cancelled claim, amendments and remarks, 112 rejections are withdrawn.

Claim Rejections - 35 USC § 103

4. Claims 1 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anandan et al., (US 6,198,852 B1), hereinafter Anandan, and further in view of Gawronski et al. (US Patent Number 6,073,056), hereinafter Gawronski.

A. Anandan discloses projecting a 3D world onto a 2D reference plane, while Gawronski discloses claim 1, "a clone-brushing method of painting in an image, the method comprising:

a) specifying a first world plane in the image [col. 1, ln. 13 – col. 3, ln. 14, wherein 'global coordinate system' corresponds to "first world plane"; and 'data model' corresponds to "image"];

b) providing a source position and a destination position in the image [col. 2, ln. 58 – col. 3, ln. 14, at The system also includes a measuring apparatus for measuring the first and second positions and orientations of the light measuring device relative to the physical part to obtain first

and second sets of position data, respectively; wherein at least one entry of the first and second sets positions correspond to "a source position and a destination position"; wherein 'data model' corresponds to "image"];

c) identifying a destination region in the image relative to the destination position [col. 2, ln. 58 – col. 3, ln. 14, wherein 'second sets of position data' corresponds to "destination region" and wherein since at least one of the 'second sets of position data' corresponds to "destination position" the two must be relative];

d) determining a source region in the image relative to the first world plane and corresponding to the destination region [col. 2, ln. 58 – col. 3, ln. 14, at 'The system further includes a computer programmed to generate a first transform based on the first set of position data, generate a second transform based on the second set of position data, map the first set of 3-D point data in a global coordinate system based on the first transform, map the second set of 3-D point data in the global coordinate system based on the second transform, and integrate the first and second sets of 3-D points data in the global coordinate system to obtain the data model of the physical part in the data format.'; wherein 'first set of position data' and/or 'first sets of 3-D point data' correspond(s) to "source region"; 'second set of position data' and/or 'second sets of 3-D point data correspond(s) to "destination region"; 'global coordinate system' corresponds to "first world plane"; and since first and second surfaces, at first and second positions are associated with a physical part 'of the physical part' and respective 'data model' or "image" with 'first and second sets of 3-D point data' and/or 'first and second sets of position data' they (source and destination regions) have a <u>corresponding</u> relationship because they are both affiliated with the physical part and data model (image).];

e) transforming image information of the source region relative to the first world plane to image information of the destination region [col. 2, ln. 58 – col. 3, ln. 25, at 'The system further includes a computer programmed to generate a first transform based on the first set of position data, generate a second transform based on the second set of position data, map the first set of 3-D point data in a global coordinate system based on the first transform, map the second set of 3-D point data in the global coordinate system based on the second transform, and integrate the first and second sets of 3-D point data in the global coordinate system to obtain the data model of the physical part in the data format.

Preferably, the light measuring device is a Moire interferometry system including a camera which forms an array of pixels, each of the pixels having a gray scale level.

Also, preferably, the first and second sets of 3-D point data overlap in the global coordinate system and wherein integration of the sets of data includes filtering the 3-D point data which overlaps in the global coordinate system.

Still, preferably, the first and second sets of 3-D point data are joined in the global coordinate system to form a polygonal structure corresponding to the first and second surfaces of the physical part';

wherein transforming and integrating 'the first and second sets of 3-D point data in the global coordinate system to obtain the data model' corresponds to the implementation of "transforming image information of the source region to image information of the destination region", and which also lends functionality to the underlined coordinating conjunctive "to", but without the implication of "from", and furthermore wherein in the presence of the 3-D point data

which overlaps and/or at the junction of joined first and second sets of 3-D point data, where both source regions and destination regions also overlap and/or are joined]; and

f) copying the transformed image information to the destination region;

although Gawronski does not appear to teach "copying the transformed image information to the destination region", Gawronski does disclose [col. 2, ln. 58 – col. 3, ln. 14, at 'and integrate the first and second sets of 3-D points data in the global coordinate system to obtain the data model of the physical part in the data format.'] [as detailed].

Therefore it would have been obvious to one of ordinary skill in the art to perform "copying the transformed image information to the destination region" in view of Gawronski's teaching of 'integrate the first and second sets of 3-D points data in the global coordinate system to obtain the data model of the physical part in the data format in combination with projecting a 3D world onto a 2D projection plane as disclosed by Anandan and motivated to combine the reference because given a projective coordinate system specified by 5 basis points, the set of constraints directly relating the projective coordinates of the camera centers to the image measurements (in 2D projective coordinates).

B. Per independent claim 18, this is directed to a system for performing the method of independent claim 1, and therefore is rejected to independent claim 1, wherein 'graphical user interface' corresponds to "interact with a user" of claim 18.

5. Claims 3 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anandan and Gawronski as applied to claim 1 and 18, respectively, above, and further in view of Isaacs (US Patent Number: 5,798,761).

A. Anandan and Gawronski discloses claim 3, "The method of claim 1, wherein step a) comprises specifying two sets of parallel lines" supra for claim 1. However, they do not appear to disclose "wherein step a) comprises specifying two sets of parallel lines", but Isaacs does in col. 4, ln. 28 – col. 5, ln. 3 at 'An object displayed in a perspective view, such as in FIG. 2(b), will become smaller as it approaches vanishing point 129. If object 121 is moved too close to vanishing point 129, it will be displayed as a single dot on the screen, effectively vanishing from the user's view.

(10) In a 3D perspective view, not all screen locations have a natural mapping position on the guiding line or plane. In FIGS. 3(a)-3(b), for example, if the user moves cursor 123 to a position above horizon line 133, object 121 might move to a position that is totally unexpected and unintended by the user. In conventional systems, object 121 often jumps abruptly to an unanticipated screen location or, in some cases, disappears altogether when cursor 123 is moved to certain locations on the screen.

(11) Similarly in FIGS. 2(a) and 2(b), discontinuous motion of object 121 may result if the user moves cursor 123 to a location that is beyond vanishing point 129. Accordingly, to prevent discontinuous or unexpected movement of a 3D object first, the screen regions that cause erratic behavior must be identified, and second, predictable behavior for the 3D object must be specified when the cursor moves through those screen regions.

(12) GUIDING LINE

(13) The situation in which a user moves a 3D object along a guiding line is now explained in more detail. A line displayed on a CRT as existing in 3D space falls into one of the three categories depicted in FIGS. 4(a), 4(b) and 4(c).

(14) In case [A] (FIG. 4(a)), the guiding line is parallel to the view plane and thus does not have a vanishing point.

(15) In case [C] (FIG. 4(c)), the guiding line is perpendicular to the view plane. As a result, the eye looks straight down the guiding line which appears as a single point on the screen.

(16) In case [B] (FIG. 4(b)), the guiding line is neither parallel nor perpendicular to the view plane and thus has a visible dimension terminating at a vanishing point.'; and col. 12, ln. 54 – col. 13, ln. 11 at '(65) The horizon and appearing lines for a plane are always parallel. The closer together they are, the nearer our view is to being edge-on. When they are coincident, the plane is viewed exactly edge-on (case [C']). In that case, projectToPlane() returns FALSE because the entire guiding plane maps to a single line on the screen and meaningful dragging is impossible. If the guiding line falls either in case [A'] or case [B'], projectToPlane() returns "result," a world space point on the guiding plane representing the placement point for the object. The logic underlying the projectToPlane() routine is illustrated by the flowchart of FIG. 12.

(66) The first step is to initialize the value of screenChoice to the cursor position in step 300. (67) At step 302, it is determined if the guiding plane is parallel to the view plane (case [A']) by checking whether or not the guiding plane has a horizon line. A plane has a horizon line if the world eye direction is not parallel to the normal of the plane in world space. To make this determination, areParallel() receives two world space lines as input--a first line that is normal to the guiding plane (wldPlane.normal) and a second line representing the world eye direction (wldEyeDir)--and tests whether they are parallel. The result of areParallel() is negated (using the "!" symbol) and the result is stored in hasHorizon.'

Therefore it would have been obvious to one of ordinary skill in the art at the time the

invention was made to apply global coordinate system for building a data model disclosed by Anandan and Gawronski in combination with parallel lines in world space disclosed by Isaacs, and motivated to combine the teachings because oftentimes it is difficult, if not impossible, to determine or provide for reference features in the local coordinate systems as revealed by Gawronski in col. 1, lines 58-60.

B. Per dependent claim 19, this is directed to a system for performing the method of dependent claim 3, and therefore is rejected to dependent claim 3, wherein 'graphical user interface' corresponds to "interact with a user" of claim 19.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anandan and Gawronski as applied to claim 1 above, and further in view of Saund (US Patent Number: 5,835,241).

A. Anandan and Gawronski discloses claim 4, "The method of claim 1, wherein step e) further comprises a bilinear interpolation of image information in the source region relative to the first world plane" supra for claim 1. However, Anandan and Gawronski do not appear to disclose "wherein step e) further comprises a bilinear interpolation of image information in the source region relative to the first world plane", but Saund does in col. 13, lns. 26-54; wherein 'world coordinate system and bi-linear interpolation' correspond to "first world plane and bi-linear interpolation" respectively.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply global coordinate system for building a data model disclosed by Anandan and Gawronski in combination with bi-linear interpolation with world coordinate system disclosed by Saund, and motivated to combine the teachings because oftentimes it is

difficult, if not impossible, to determine or provide for reference features in the local coordinate systems as revealed by Gawronski in col. 1, lines 58-60.

7. Claims 5, 11 and (20) are rejected under 35 U.S.C. 103(a) as being unpatentable over Anandan and Gawronski as applied to claim 1 and (18), respectively above, and further in view of Suzuki et al., (US Patent Number: 5,475,507), hereinafter Suzuki.

A. Anandan and Gawronski discloses claim 5, "The method of claim 1 further comprising: providing a first color sample region for the source region; providing a second sample color region for the destination region; and computing a color ratio between the first color sample region and the second color sample region, wherein step e) further comprises applying the color ratio to the image information of the source region" supra for claim 1. However, Anandan and Gawronski do not appear to disclose "further comprising: providing a first color sample region for the source region; providing a second sample color region for the destination region; and computing a color ratio between the first color sample region and the second color sample region, wherein step e) further comprises applying the color ratio to the image information of the source region", but Suzuki does in col. 10, ln. 66 – col. 11, ln. 21; wherein 'object and the background color' correspond to "first and second color sample region", and 'object color and the background color are mixed with each other is modeled by the ratio k (k=0 to 1) of the object color relative to the background color' corresponds to "wherein step e) further comprises applying the color ratio to the image information of the source region".

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply global coordinate system for building a data model disclosed by Anandan and Gawronski in combination with modeling color mixing as a ratio disclosed by

Suzuki, and motivated to combine the teachings because when object extraction has such poor precision as to result in an image portion that should belong to the background being extracted, or an image portion that should belong to the object remaining unextracted, the subsequent image processing, such as color-changing, composition, enlargement, reduction, or transfiguration, provides an image of poor quality, such as an image including an unnecessarily color-changed portion in the background as revealed by Suzuki in col. 3, lines 4-11.

B. Per independent claim 11, this is directed to a method for performing the method of independent claim 1 and depend claim 5, and therefore is rejected to independent claim 1 and dependent claim 5.

C. Per dependent claim 20, this is directed to a system for performing the method of dependent claim 5, and therefore is rejected to dependent claim 5, wherein 'graphical user interface' corresponds to "interact with a user" of claim 20.

8. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anandan and Gawronski as applied to claim 1 above, further in view of Suzuki as applied to claim 5 above and further in view of Berriss et al., (US 2003/0086627 A1), hereinafter Berriss.

A. Anandan and Gawronski and Suzuki disclose claim 6, "The method of claim 5, wherein the color ratio is computed using Gaussian weighted averages of the first and second sample color regions" supra for claim 5. However, Anandan and Gawronski and Suzuki do not appear to disclose, "wherein the color ratio is computed using Gaussian weighted averages of the first and second sample color regions", but Berriss, does in [para. 0004], wherein 'Gaussian function for each dominant colour are stored as a colour descriptor of the image region, together with weights indicating the relative proportions of the image region occupied by the dominant colours, and

Gaussian mixture of the colour distribution' corresponds to "wherein the color ratio is computed using Gaussian weighted averages of the first and second sample color regions".

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply global coordinate system for building a data model disclosed by Anandan and Gawronski in combination with modeling color mixing as a ratio disclosed by Suzuki, and motivated to combine the teachings because when object extraction has such poor precision as to result in an image portion that should belong to the background being extracted, or an image portion that should belong to the object remaining unextracted, the subsequent image processing, such as color-changing, composition, enlargement, reduction, or transfiguration, provides an image of poor quality, such as an image including an unnecessarily color-changed portion in the background as revealed by Suzuki in col. 3, lines 4-11, and coupled with Gaussian mixture of the colour distribution as disclosed by Berriss and motivated to combine the teachings because it provides a method and apparatus for matching, searching for and retrieving images as disclosed by Berriss in [para. 0001].

B. Per dependent claim 12, this is directed to a method for performing the method of independent claim 1 and depend claim 6, and therefore is rejected to independent claim 1 and dependent claim 6.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anandan and Gawronski as applied to claim 1 above, further in view of Suzuki as applied to claim 5 above and further in view of Darling, (US 5,054,008).

A. Anandan and Gawronski and Suzuki disclose claim 7, "The method of claim 5, wherein the first color sample region is provided with respect to the first world plane" supra for claim 5.

However, Anandan and Gawronski and Suzuki do not appear to disclose, "wherein the first color sample region is provided with respect to the first world plane", but Darling, does in col. 3, lns. 6-35, wherein 'world portraying all land areas of the world in a single plane' corresponds to "world plane" and 'color coding of each of the time zones' corresponds to at least "first color sample region".

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply global coordinate system for building a data model disclosed by Anandan and Gawronski in combination with modeling color mixing as a ratio disclosed by Suzuki, and motivated to combine the teachings because when object extraction has such poor precision as to result in an image portion that should belong to the background being extracted, or an image portion that should belong to the object remaining unextracted, the subsequent image processing, such as color-changing, composition, enlargement, reduction, or transfiguration, provides an image of poor quality, such as an image including an unnecessarily color-changed portion in the background as revealed by Suzuki in col. 3, lines 4-11, and coupled with color region associated with world plane as disclosed by Darling and motivated to combine the teachings because it provides associating first and second time zone positions and corresponding land areas by means of the visual coding as disclosed by Darling in [Abstract].

10. Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anandan and Gawronski as applied to claim 1 above, and further in view of Pryor, (US Patent Number: 4,898,537).

A. Anandan and Gawronski discloses claim 8, "The method of claim 1, further comprising specifying a second world plane and a relative scale factor in the image, wherein: step d)

comprises determining a source region in the image relative to the first world plane and corresponding to the destination region relative to the second world plane and the relative scale factor; and step e) comprises transforming the image information of the source region relative to the first world plane to image information of the destination region relative to the second world plane and the relative scale factor" supra for claim 1. However, Anandan and Gawronski do not appear to disclose "further comprising specifying a second world plane and a relative scale factor in the image, wherein: step d) comprises determining a source region in the image relative to the first world plane and corresponding to the destination region relative to the second world plane and the relative scale factor; and step e) comprises transforming the image information of the source region relative to the first world plane to image information of the destination region relative to the second world plane and the relative scale factor", but Pryor does in Abstract; wherein 'first surface is a map of the world and s second an antipodal map of the world reversed by 180 degree' correspond to "first and second world planes", wherein scale factor inherently corresponds to one – see Fig. 1.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply global coordinate system for building a data model disclosed by Anandan and Gawronski in combination with first and second world planes disclosed by Pryor, and motivated to combine the teachings because the process provides for complex spatially related information as revealed by Pryor in col. 1, lines 1-2.

B. Anandan, Gawronski and Pryor disclose claim 10, "The method of claim 8, wherein specifying the relative scale factor comprises specifying a line segment of unit length relative the first world plane and specifying a line segment of unit length relative to the second world plane"

supra for claim 8, wherein grid patterns of relative 180 degree world planes of Fig 1 correspond to "specifying a line segment of unit length relative the first world plane and specifying a line segment of unit length relative to the second world plane".

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply global coordinate system for building a data model disclosed by Anandan and Gawronski in combination with first and second world planes and grid patterns disclosed by Pryor, and motivated to combine the teachings because the process provides for complex spatially related information as revealed by Pryor in col. 1, lines 1-2.

11. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anandan and Gawronski as applied to claim 1 above, further in view of Isaacs as applied to claim 3 above, and further in view of Pryor as applied to claim 8 above.

A. Per dependent claim 9, "The method of claim 8, wherein specifying the second world plane comprises specifying two sets of parallel lines", this is directed to a method for performing the method of dependent claims 1, 3 and 8 and therefore is rejected to dependent claims 1, 3 and 8.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply global coordinate system for building a data model disclosed by Anandan and Gawronski in combination with parallel lines in world space disclosed by Isaacs, and motivated to combine the teachings because oftentimes it is difficult, if not impossible, to determine or provide for reference features in the local coordinate systems as revealed by Gawronski in col. 1, lines 58-60, and coupled with first and second world planes disclosed by

Pryor, and motivated to combine the teachings because the process provides for complex spatially related information as revealed by Pryor in col. 1, lines 1-2.

12. Claim 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anandan and Gawronski as applied to claim 1 and 18, respectively, above, and further in view of Shirakawa (US 5,818,415).

A. Anandan and Gawronski discloses claim 13, "A clone-brushing method of painting in an image, the method comprising:

a) providing a source position in the image;

b) providing an initial destination position in the image;

c) determining a snapped destination position;

d) identifying a destination region in the image relative to the snapped destination position;

e) determining a source region in the image corresponding to the destination region;

f) transforming image information of the source region to image information of the destination region; and

g) copying the transformed image information to the destination region" supra for claim 1. However, Anandan and Gawronski do not appear to disclose "c) determining a snapped destination position; d) identifying a destination region in the image relative to the snapped destination position", but Shirakawa does in col. 3, lns. 51-65. Wherein 'second grid origin movement means changes the coordinate values of the origin of the effective grid to coordinate values obtained by the normalization' and 'final operation position (final snap position)' correspond to "snapped destination position".

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply global coordinate system for building a data model disclosed by Anandan and Gawronski in combination with final snap position disclosed by Shirakawa, and motivated to combine the teachings because graphic form inputting apparatus with a grid function, in order to allow a graphic form such as a rectangle, a circle or a polygon to be inputted with accurate dimensions, a grating called grid is displayed on the screen of a display apparatus and coordinate values of a point on the screen designated by an operator by means of a pointing device such as a mouse are normalized (snapped) to coordinate values of one of intersecting points of grid lines of the grid which is nearest to the position defined by the coordinate values of the designated point as revealed by Shirakawa in col. 1, lines 13-23.

B. Anandan, Gawronski and Shirakawa disclose claim 14, "The method of claim 13, wherein step c) comprises searching a collection of candidate destination positions" supra for claim 13, wherein 'the coordinate values of the origin of one of the two grids' corresponds to "collection of candidate destination positions".

Allowable Subject Matter

13. Claims 15-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. Claims 15-17 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph and 1st paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

15. Applicant's arguments with respect to claims 1 and 3-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Responses

17. Responses to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231.

Inquiries

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory F. Cunningham whose telephone number is (571) 272-7784.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The Central FAX Number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

G.F. Cunningham

Gregory F. Cunningham
Examiner
Art Unit 2628

gfc

12/6/2006

Mark Zimmerman

MARK ZIMMERMAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600